CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Previously Presented) A method of displaying all direct connections between a subject node and outside nodes not displayed on a map currently presented on a graphical user interface (GUI) of a communication network, wherein each of said outside nodes is associated with at least one of a plurality of outside node groups, the method comprising:

bundling, for each of said plurality of outside node groups, said direct connections between said subject node and said outside nodes belonging to said outside node group to create an outside link bundle;

grouping said outside link bundles into a multiple link connector (MLC) object and associating an interactive connector icon with said MLC object;

displaying said interactive connector icon on said map, wherein said interactive connector icon is attached to said subject node; and

displaying, responsive to selecting said interactive connector icon, a pop-up window showing a multiple link connector (MLC) list wherein each item in said MLC list represents an outside link bundle and a corresponding outside node group, the outside link bundle comprising one or more direct connections.

2. (Canceled)

3. (Previously Presented) The method of claim 1, wherein:

said MLC list displays in each row an interactive outside link widget associated with a respective interactive group identification widget,

each interactive outside link widget is associated with one of said outside link bundles, and

each interactive group identification widget is associated with a respective one of said outside node groups.

4. (Previously Presented) The method of claim 3, further comprising:

selecting said interactive outside link widget on said MLC list to display a connections list L(n) identifying all direct connections bundled within said outside link bundle.

5. (Previously Presented) The method of claim 3, further comprising:

selecting said respective interactive group identification widget on said multiple link connector list to display a sub-map of said network showing said one of said outside node groups.

6. (Currently Amended) A network management system (NMS) for providing a modified graphical user interface (GUI) adapted to transmit commands and display information with a view to enable management of a communication network, the ~~system~~ NMS comprising:

an interface that connects the NMS to a network device to be displayed on the map of interest;

a map data collector that collects, via the interface, map data for the a network device to be displayed on the a map of interest;

an outside link locator that bundles direct connections between said network device and each of a plurality of groups of outside network devices external to said map into an outside link bundle, and maintains a connections list L(n) for each of said outside link bundles;

a multiple link connector (MLC) generator that groups said outside link bundles for said network device into a multiple link connector (MLC) and associates an interactive connector icon with said MLC, wherein said interactive connector icon is displayed on said map and is attached to said network device; and

a list organizer that displays a multiple link connector (MLC) list on a screen of a workstation in response to a selection of said interactive connector icon, each row of said MLC list showing an association between one of said outside link

bundles and a respective one of said plurality of groups of outside network devices, each outside link bundle comprising one or more direct connections.

7. (Canceled)

8. (Currently Amended) The NMS ~~modified GUI~~ of claim 6, wherein each said outside link bundle is displayed on said MLC list using an interactive outside link widget.

9. (Currently Amended) The NMS ~~modified GUI~~ of claim 6, wherein each said group of outside network devices associated with said respective outside link bundle is displayed using an interactive group identification widget.

10. (Currently Amended) The NMS ~~modified GUI~~ of claim 8, wherein said list organizer displays said list of connections L(n) associated with a respective outside link bundle, in response to selection of said interactive outside link widget.

11. (Currently Amended) The NMS ~~modified GUI~~ of claim 9, wherein said list organizer displays a sub-map of said group in response to selection of said interactive group identification widget.

12. (Currently Amended) The NMS ~~modified GUI~~ of claim 6, wherein said interactive connector icon is not generated for a MLC containing only one connection.

13. (Previously Presented) A method of using a modified graphical user interface (GUI) adapted to reduce the cluttering of icons on a map of interest, the method comprising:

whenever a network device has direct connections to a group of outside network devices external to said map, bundling said direct connections into an outside link bundle;

displaying an interactive multiple link connector (MLC) icon, the MLC icon grouping all outside link bundles associated with said network device into a single icon; and

selecting said MLC icon on said map to obtain a multiple link connector (MLC) list that displays an interactive outside link widget for each of said outside link bundles, each outside link bundle comprising one or more direct connections and each interactive outside link widget associated with an interactive group identification widget for each group of outside network devices directly connected to said network device.

14. (Previously Presented) The method of claim 13, further comprising:

selecting said interactive outside link widget for said associated outside link bundle to obtain a list L(n) with all direct connections contained in said associated outside link bundle.

15. (Previously Presented) The method of claim 13, further comprising:

selecting said interactive group identification widget on said multiple link connector list to display a sub-map of all network devices in said associated group.

16. (Previously Presented) For a GUI of a communication network, a computer-readable medium embodying a comprehensive network map illustrating all outside link bundles to a plurality of network devices external to said map, comprising:

a network device icon, illustrating a network device in the context of said map;

an interactive multiple link connector (MLC) icon associated to said network device, representing all outside link bundles between said network device and all groups of outside network devices directly connected to the network device, wherein said MLC icon comprises a button for enabling display of a multiple link connector (MLC) list; and

a pop-up window displaying said MLC list, wherein each row in said MLC list displays one of said outside link bundles and said group of outside network devices to which said outside link connects, said one of said outside link bundles comprising a plurality of direct connections between the network device and said group of outside network devices.

17. (Canceled)

18. (Previously Presented) The computer-readable medium of claim 16, wherein each row of said multiple link connector list comprises an outside link widget associated with a group identification widget.

19. (Previously Presented) The computer-readable medium of claim 18, further comprising:

a list with all direct connections between said network device and said group, the list displayed on said map upon selection of said outside link widget.

20. (Previously Presented) The computer-readable medium of claim 18, further comprising:

a sub-map of said group displayed on said map upon selection of said group identification widget.

21. (Previously Presented) The method of claim 1, wherein at least one of said plurality of outside node groups is associated with only one outside node.

22. (Currently Amended) The NMS ~~modified GUI~~ of claim 6, wherein at least one of said plurality of groups of outside network devices is associated with only one outside network device.

23. (Currently Amended) The method ~~modified GUI~~ of claim 13, wherein at least one of said groups of outside network devices is associated with only one outside network device.